WALDLUST

모바일 인증 디바이스 및 시스템 2012~







Contents

- I. Introduction
- **II.Product & Service**
- III. Technology & Patent
- IV. Advatages
- V.Business strategy and business outlook

I. Intoduction

WALDLUST

- Stamp is a world-widely used information transfer method and it is able to deliver intuitively familiar and trusty image to users.
- The combination of smart-phones and stamps provides a new experience to users and its ideas have been discussed actively.
- The company is able to develop the most commonly used and secure stamps for mobile devices and provide their solutions.





Product Information

Touch Stamp(2013 ~ now)

Content

Recognition of users by applying multi touches on smart-phone screen

Application scope

Suitable for simple tasks like frequent customer point buildup, roster checks, and customer authorization

Advantages

No battery, stability, and fast recognition

Disadvantages

Limited numbers of patterns, low security, inapplicable phones



Digital Stamp_Ver 2.0 (on mass production)

Content

Recognition of users by applying electronic touches on smart-phone screen

Application scope

Suitable for security tasks, like frequent custom er point buildup, certificate issues and authorization

Advantages

Applicable on most (more than 90%) phones, high security, more than one billion patterns

Disadvantages Battery required (rechargeable)





Product Development Roadmap



Version 2

Digital Stamp Technology (2nd version): Under development (will be completed December 2 017)

Content

Applicable on all smart-phones adapting Finger-Like-Touch technology Satisfying high availability and security.

Application scope

Any off-market stores, like supermarket, or convenient stores national wide.

Advantages

Applicable on every smart-phone, no need to recharge since battery lasts 2 years, Suitable for more than one billion stores around the world due to high availability, security, and convenience



Digital Stamp Technology (3rd version): will begin the development in 2017 (Completed December 2017)

Content

In addition to the touch technology, the state-of-the-art security technologies, such as hard ware security (ICTK), BLE, and RFID, will be applied.

Application scope

Individual and company authorization (replaceable of Digital Signature Certificate), Secret keys, Pin-tech (mobile payment)

Advantages

Unhackable mobile banking accomplished

(Mobile banks becomes safe and easy by replacing OPT and Digital Signature Certificate with fingerprint recognition and security application pattern creation)

Any off-line payment, Digital Signature Certificate, and ID checks are available through smart-phones.

Any authorization requiring stamps or signature is available by mobile.

Applicable globally due to easy portability like carrying plastic cards. Chips are inserted into credit cards or debit cards.



Related Authorization Technology



Content

Technology to authorize stamps on smart-phone screen.

The information received from the phones goes through the first authorization of SDK and API, and the second in the security server, which sends back the encrypted codes for each stamp.

/application]

They are decoded in the smart-phones through SDK and API.

Application scope

Stamps taken by applications on the smart-phones are authorized or by opening web browsers (Safari or Explore r) on them.

Advantages

Available around the world, fast and safe authorization. Since they exist in the forms of SDK and API, customer's information exist in their servers. The authorized values are processed in the big date analysis.



Electronic Stamp Usage

Currently available services

Frequent cust omer point ser vice

- · Point savings through electronic coupons
- Points earning and using. Available in delivery orders or outdoor stores without links with POS.
- Additional values by providing services (ex. cross-marketing), which was unavailable on paper coupons

Information exchange

- · Effective communication points through stamping of the owner
- Other solutions such as electronic business cars or exhibition solutions

Users, custom ers check

• Simple attendee checks in places like amusement park, conference, concert, restaurant, or school

Future Services

Individual authorization

- Individual authorization in the business of public office, bank or insurance contr acts by three-way security (patterns, OPT, fingerprint) and server authorization.
- Available in the P2P loan business

Replacement of analogue s ervice

- · Replaceable of off-line documents through on-line secured stamp
- 2 way authorization (OPT, fingerprint) of the stamps without help of external institutes



Growth possibilities of the Electronic Stamp Market

Points market in Japan, the target market of the company and Korean associates is on the drastic grow.

Due to the fierce competition of B2C market in Japan, partnerships between heterogeneous businesses are increasing.

1 trillion JYP is expected in 2010 by franchising small and medium sized stores, rather than dependency on big company chains.

간 포인트 4개 유영사 현황

Devices to build up trusting customer relations at low cost in order to build up frequent customer points

			식 포인트 4개 군당자 연광			
		ř	T T	(단위: 만 명, 개)		
구분		T-POINT T 포인트	Ponta Fonta 포인트	Rakuten 슈퍼포인트	d doorcoop d POINT CARD d POINT CARD d 平 OLE	
운영회사		T Point Japan	Loyalty Marketing	Rakuten	NTT docomo	
회원 수		5,630	7,260	1억330	5,400	
점포 수		43만753	약 10만	약 52만	약 1만4000	
주요 제휴사	소매	Family Mart(편의점) Edion(가전양판) Welcia(드럭스토어)	LAWSON(편의점) AOKI(슈퍼)	SUNKS(편의점) Circle K(편의점) POPLAR(편의점) Daimaru(백화점) Matsuzakaya (백화점)	LAWSON(편의점	
	외식	GUSTO (패밀리레스토랑) Doutor Coffee(카페) Gyukaku(불고기) Yosinoya(덮밥)	KFC(패스트푸드) Ootoya (패밀리레스토랑)	Mister Donut (도너츠) PRONTO(카페)	McDonald's (패스트푸드)	
	에너지	JX(주유) 도쿄전력(전기)	Showa Shell(주유) 도쿄전력(전기)	Idemitsu Kosan(주유)	-	
	기타	Softbank(이동통신)	JAL(항공) Route-Inn(호텔) Orix 렌트카(렌트카) Apaman Shop(부동산)	일본통운 (택배/이사) 사카이 이삿짐센터	_	
	인터넷 사이트	Yahoo Shopping Ameba(블로그) Demaekan (배달웹사이트)	Jalan Net(여행) hotpepper Beauty (미용) HMV(음악/서적)	Rakuten Market Rakuten Travel Rakuten Books	_	



Current distribution (p10)









- 43 Paperlot stores -> 44,500 users
- Lotte World "Magic Pass" -> Opened on November 27, 2015
- LOHB(Lotte Health&beauty) All stores In Korea(90stores-March. 2017) on Service

11 stores of LG Household & Health Care "Tomaru" -> Myeongdong, Gwangwhamun, Gundae, and Ewha Hotplace

- Blue Stamp, local stores & delivery point service -> 2,000 stores

Worldwide

- German 50 stores → under test
- US 40 Stores → under test
- Japan 100 Stores → Travel Service Lounched



Product Development and Accomplishments

2016

- Jul. Lotte Health&Beauty(LOHBs) has adopted Wald Stamp for visitors in the store. In all 70 stores and more on.
- Jun. 1st Wald Digital Stamp is on line to go worldwide.
- Jan. BlueStamp Service started with 2000 Wald Stamps

2015

- Dec. provided touch stamps LG Household & Health Care "TOMARU Station"
- Nov. Touch Stamp to <u>LOTTE WORLD</u>(MAGIC PASS System)
- Sep. Contracted with Local Marketing Partners for Domestic agent
- Jul. Digital Stamp launched
- Jun, Paperlot service at YBM Education
- May, Developed and provided touch stamps to MojidoCorfire(DE, US)

2014

- Dec. YAP strategic alliance(Patent License Agreement)
- Oct. MPNC., Co. Ltd. Product Supply Agreement
- May. Developed and provided touch stamps to MojidoCorfire(DE, US)

2013

- Dec. Started to develop Digital Stamp
- Oct. Paperlot 2nd upgrade(UX, function added)
- Sep. Established WALDLUST corporation
- Jun. Paperlot android version launched
- Apr. Completed Foreign patent of touch screen terminal authentication for 20 countries

2012

- Nov. World's first registered touch stamp app. @ appstore.
- Oct. World's first developed multi-touch stamp
- Jan, Completed Korea patent of touch screen terminal authentication



III. Technology & Patent

Patent status and patent strategies

"Owned the patent of "Authorization method by multi-touching or touches in a certain order on electronic touch screen devices" in Korea (Applied in 20 countries, USA, China, Japan and Europe)

Communication of NFC or Bluetooth communications in the traditional smart-phone authorization was common but they are not supported by every cell-phone, and known as their low availability and weak security.

This authorization is available on most smart-phones since digital touch stamps use touch screens, and specialized on mobiles to strengthen security by applying touches with the media, fingerprint recognition, and OTP.

Patented technologies





등록 특허 제 10-13-5412 호

제 10-13-5413 호

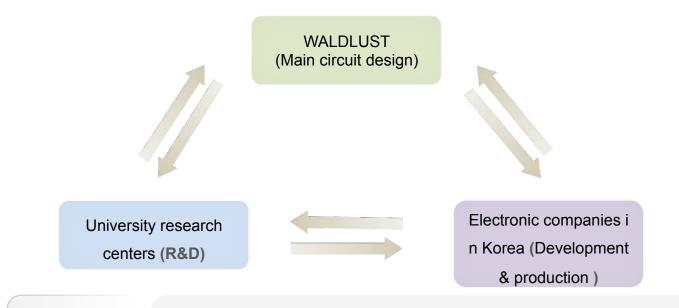
Touch stamps for devices with touch screen and their authorizati on system and methods

Future strategies

Research center at universities that associate the research with the company receive the patents and they are transferred to this company as preferred. The company will establish the diversified portfolio of patents on smart-phone touch device technologies and maximize the company values and business security.



Research and Development Status



Target 2017

Waldlust Stamp research center setup (Currently under discussion with university professors)

- · Digital stamp upgrade
- Server/Stamp authorization technology upgrade
- PC version (Stamp pad) development
- Device expansion: touch screen tester
- SDK/ replacement of digital stamp technology

Paperlot service expansion and new service development

- Local shop x local shop: search new local markets by advertizing in and outside of the store
- · Paperlot for exhibition: Paperless Expo promotion
- Snowball: Map blog service (Service expansion through individual design map)



Comparative Advantages Compared to Other Stamps

Availability and compatibility (Touch & Sound technology)

Touch on Screen and Sound are mostly used function in smartphone. Using these two techn ology makes easy to be adopted in all smartphone in the world(iOS, Android)

Other methods of NFC, BLE, WiFi Sound, QR codes are taking the use of extra functions in smart-phones, which lowers the availability, leads to inconvenience of users, and deteriorate s the effective service values.

The technologies of Waldlust could be used on every smart-phone and services without failures in any service and market.

Technology	NFC	BLE (bleutooth4.0)	QR Code	SoundQR	Digital Touch Tech
Universality	Low Not support iOS	Low On-Off	High Use Camera	High	Very High
Security	High	Middle Duplicable	Low Duplicable	High	Very High Not duplicable
Cost	High	Middle	Very Low	Middle	Middle
Scalability	High	High	High	High	High



Business strategy

Target

Connecting with domestic O2O service (point, subscription, gift certificate, etc.)

- Stamp business expansion through distributors
- Establish stamp reference and expand profit structure by selfservice launch

· Japan, China, Taiwan, Indonesia and Vietnam, but there is a bigger offline market

- Manufacturing products that can be used in point market O2O of Asian countries such as Japan and Taiwan
- Chinese prepayment payment Enter into domestic and overseas markets with simplified technology.

Process

- September 2015 Signed a distributor agreement with local marketing partners.
- Stamp application Event service Continuous development (eg Myunadona)
- Contract with domestic and overseas developers to enter stamp service by module
- Guidebook (GuideBook, CongKong)
- Mobile vouchers, entry into the prepaid market
- Ticket, attendance, etc. Enter the certification market

- Mojido Cofire's introduction to Germany, USA • Launched Paperlot service (in 2017) to
- bakery and nail shop through strategic alliance with local companies in Germany)

• Japan: Entering the service market of

Japanese telecommunication companies and distributors

Entered Japan travel and dining

service through LINKAGIA JAPAN

Hanover CeBIT (March) participated in overseas buyers and companies. Entry into overseas markets from EU.

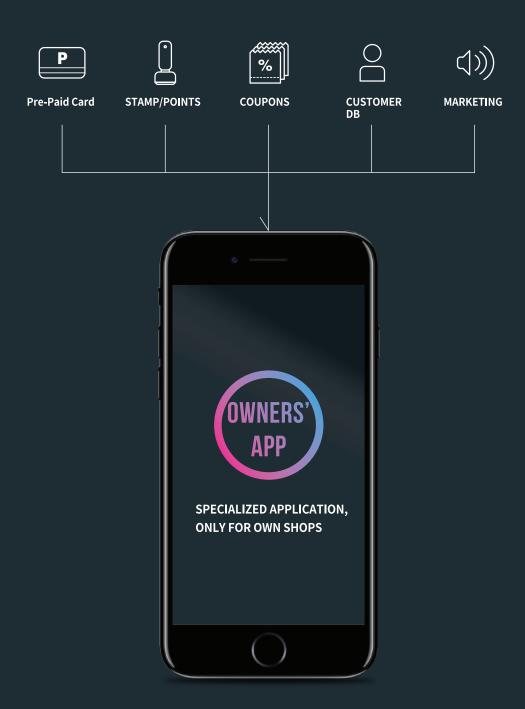
Overseas

Domestic



SMART EASY SIMPLE OWNERS'APP

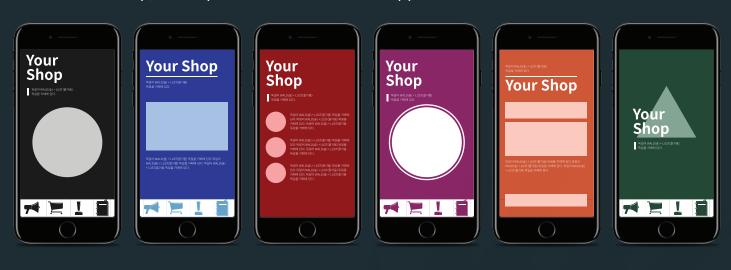
What is the "OWNERS' APP?



'PRE-PAID + COUPON + STAMPCARD + CUSTOMER SERVICE + MARKETING'
Owners' App is customized mobile application & customer services solution for each shops.

1 OWNERS' APP

With our membership, all shops will have own mobile application + administration mode of software



Owners' app · App For you · Only u app

Like McDonald & Starbucks, HAVE YOUR OWN MOBILE APPLICATION!!
On Android & Apple application market, just put the name of each shop, then customer will be with YOU!

2 Easy and fast use with Digital Stamp



Internationally patented technology is included in the membership program on FREE. With the digital stamp, each point or coupon can be issued and consumed in the same way. All pre-paid card solution & stamping for coupon is possible

3 Management of shops & customers.



Marketing channel

SENDING pushing mail / events letter / discount coupon to RIGHT customers



Points & Coupons management

ISSUE points/ coupon as pre-paid card & customer card on mobile



Business analysis report

ALL Data Base with telephone /email address of customers. Easy access to check all business running results in administrative mode

Why do you pay such higher cost for paper coupon and Sales board on street or mailing to each house with paper sales sheet? Are you sure that right potential customers will see your card & coupon?

With Owner's APP, You will experience a completely different era of customer service and management.









OWNERS' Mobile application + Memberships program
Marketing tool
Admin mode of software
Digital stamp

= 20 euro per Month

스 마 트 폰 · 스 탬 프 카 드 · 페 이 퍼 랏

Contact Info

WALDLUST

office: 4F, 8, Banga-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

tel: 82-31-781-4531

mobile: 82-10-6302-5545

fax: 82-31-781-4530

email: help@waldlust.co.kr

www.waldlust.co.kr

